

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A spinal implant system, comprising:

a vertebral prosthesis having a support and a prosthesis endplate, the vertebral prosthesis having a longitudinal axis configured to be aligned along the axis of a spine, wherein the support comprises a first portion slidably received in a second portion and wherein the height of the vertebral prosthesis is adjusted by sliding the first portion relative to the second portion;

an artificial spinal disc, comprising:

a disc endplate; and

a disc core coupled to the disc endplate;

wherein the artificial spinal disc is coupled to the prosthesis endplate, the prosthesis endplate having a structure adapted to interlock with the artificial spinal disc, and further wherein the disc core is configured to allow the disc endplate to move relative to the prosthesis endplate whereby the artificial spinal disc acts as a joint to permit a range of motion between the vertebral prosthesis and the spine; and

a pedicle screw retainer coupled to at least one of the prosthesis endplate and the support, the pedicle screw retainer comprising:

a top,

a bottom,

a side wall defined between the top and the bottom, and

at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the vertebral prosthesis, wherein the aperture is configured to receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer.

2. (Cancelled)

3. (Previously Presented) The spinal implant system of claim 1, wherein the structure prevents rotation of the disc core relative to the prosthesis endplate.

4. (Cancelled)

5. (Previously Presented) The spinal implant system of claim 1, wherein the structure is at least one of a flange and a recess.

6. (Currently Amended) The spinal implant system of claim 1, wherein the prosthesis endplate and the support are adapted to be at least one of threaded, snapped, or twist-locked onto one another.

7. (Currently Amended) A spinal implant system, comprising:

a vertebral prosthesis having a support and a prosthesis endplate, the vertebral prosthesis having a longitudinal axis configured to be aligned along the axis of a spine, wherein the support comprises a first portion slidably received in a second portion and wherein the height of the vertebral prosthesis is adjusted by sliding the first portion relative to the second portion;

an artificial spinal disc, comprising:

a disc endplate; and

a disc core coupled to the disc endplate;

wherein the artificial spinal disc is coupled to the prosthesis endplate, and further wherein the disc core is configured to allow the disc endplate to move relative to the prosthesis endplate whereby the artificial spinal disc acts as a joint to permit a range of motion between the vertebral prosthesis and the spine; and

a pedicle screw retainer coupled to at least one of the prosthesis endplate and the support, the pedicle screw retainer comprising:

a top,

a bottom,

a side wall defined between the top and the bottom, and

at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the vertebral prosthesis, wherein the aperture

is configured to receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer.

8. (Currently Amended) The spinal implant system of claim 7[[1]], further comprising a locking ring adapted to secure the first portion relative to the second portion wherein the support is adjustable to change the height of the support.

9. (Currently Amended) The spinal implant system of claim 7[[8]], further comprising a second prosthesis endplate coupled to the support, the second prosthesis endplate adapted to be coupled to a second artificial spinal disc.

10. (Withdrawn – Currently Amended) The spinal implant system of claim 7[[8]], further comprising a second prosthesis endplate coupled to the support, the second prosthesis endplate having teeth adapted to be coupled to a bone.

11. (Currently Amended) A vertebral prosthesis system including a vertebral prosthesis and a spinal disc prosthesis, the vertebral prosthesis comprising:

a shaft having a longitudinal axis configured to be aligned along the axis of a spine, the shaft comprising a first portion slidably received in a second portion and wherein the height of the vertebral prosthesis is adjusted by sliding the first portion relative to the second portion;

a prosthesis endplate coupled to one end of the shaft, the prosthesis endplate adapted to be implanted adjacent the disc prosthesis, thereby obviating the need to fuse the prosthesis endplate to an adjacent vertebra; and

a pedicle screw retainer coupled to at least one of the shaft and the prosthesis endplate, the pedicle screw retainer comprising:

a top,

a bottom,

a side wall defined between the top and the bottom, and

at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the shaft, wherein the aperture is configured to

receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer;

wherein the disc prosthesis comprises a disc endplate and a disc core coupled to the disc endplate, and further wherein the disc core is configured to allow the disc endplate to move relative to the prosthesis endplate whereby the disc prosthesis acts as a joint to permit a range of motion between the vertebral prosthesis and the spine.

12. (Withdrawn) The vertebral prosthesis system of claim 11, further comprising a second prosthesis endplate coupled to an other end of the shaft, wherein the second prosthesis endplate comprises one or more teeth configured to directly interface with an other adjacent vertebra, thereby allowing fusion of the vertebral prosthesis with the other adjacent vertebra while preserving motion between the vertebral prosthesis and the adjacent vertebra.

13. (Previously Presented) The vertebral prosthesis system of claim 11, further comprising a second prosthesis endplate, wherein the second prosthesis endplate is adapted to be implanted adjacent a second disc prosthesis.

14. (Cancelled)

15. (Currently Amended) The vertebral prosthesis system of claim 11, wherein the prosthesis endplate and the shaft are adapted to be at least one of screwed, threaded, snapped, or twist-locked onto one another.

16. (Cancelled)

17. (Currently Amended) The vertebral prosthesis system of claim 11, further comprising a locking ring adapted to secure the first portion relative to the second portion wherein the height of the shaft is adjustable.

18. (Withdrawn) The vertebral prosthesis system of claim 11, wherein the shaft is at least partially constructed of a mesh.

19-20. (Cancelled)

21. (Currently Amended) A vertebral prosthesis system comprising:

a vertebral prosthesis comprising:

a shaft having a longitudinal axis configured to be aligned along the axis of a spine;

a first prosthesis endplate coupled to a first end of the shaft, the first prosthesis endplate having a recess;

a second prosthesis endplate coupled to a second end of the shaft; and

a pedicle screw retainer coupled to at least one of the shaft, the first prosthesis endplate, and the second prosthesis endplate, the pedicle screw retainer comprising:

a top,

a bottom,

a side wall defined between the top and the bottom, and

at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the shaft, wherein the aperture is configured to receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer; and

an artificial spinal disc, comprising:

a disc endplate; and

a disc core coupled to the disc endplate;

wherein the recess of the first prosthesis endplate is adapted to receive the artificial spinal disc, wherein the recess prevents rotation of the disc core relative to the first prosthesis endplate, and further wherein the disc core is configured to allow the disc endplate to move relative to the first prosthesis endplate whereby the artificial spinal disc acts as a joint to permit a range of motion between the vertebral prosthesis and the spine.

22. (Withdrawn) The vertebral prosthesis system of claim 21, wherein the second prosthesis endplate comprises one or more teeth configured to interface with an adjacent vertebra.

23. (Previously Presented) The vertebral prosthesis system of claim 21, wherein the second prosthesis endplate has a second recess adapted to receive a second artificial spinal disc.

24. (Cancelled)

25. (Currently Amended) The vertebral prosthesis system of claim 21, wherein the first prosthesis endplate and the shaft are adapted to be at least one of screwed, threaded, snapped, or twist-locked onto one another.

26. (Cancelled)

27. (Previously Presented) The vertebral prosthesis system of claim 21, wherein the shaft is adjustable to change the height of the shaft.

28. (Withdrawn) The vertebral prosthesis system of claim 21, wherein the shaft is at least partially constructed of a mesh.

29. (Currently Amended) The vertebral prosthesis system of claim 21, further comprising a pedicle screw received by the at least one aperture of the pedicle screw retainer wherein the recess prevents rotation of the disc core relative to the first prosthesis endplate.

30. (Currently Amended) The vertebral prosthesis system of claim ~~23~~29, wherein the second recess prevents rotation of the disc core relative to the second prosthesis endplate wherein the second prosthesis endplate has a second recess adapted to receive a second artificial spinal disc.

31. (Cancelled)

32. (Currently Amended) A spinal implant system having a vertebral prosthesis compatible with multiple disc prostheses, comprising:

a shaft having a longitudinal axis configured to be aligned along the axis of a spine, the shaft comprising a first portion slidably received in a second portion and wherein the

height of the vertebral prosthesis is adjusted by sliding the first portion relative to the second portion;

an endplate tray coupled to the shaft, wherein the endplate tray is implanted adjacent either one of a first artificial disc having a first shape or a second artificial disc having a second shape, wherein the first shape is different from the second shape, wherein the first artificial disc and the second artificial disc each comprise a disc endplate and a disc core coupled to the disc endplate, and further wherein each disc core is configured to allow each disc endplate to move relative to the vertebral prosthesis whereby the first and second artificial discs act as joints to permit a range of motion between the vertebral prosthesis and the spine; and

a pedicle screw retainer coupled to at least one of the shaft and the endplate tray, the pedicle screw retainer comprising:

a top,

a bottom,

a side wall defined between the top and the bottom, and

at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the shaft, wherein the aperture is configured to receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer.

33. (Cancelled)

34. (Currently Amended) The spinal implant system having a vertebral prosthesis compatible with multiple disc prostheses of claim 32, wherein the endplate tray and the shaft are adapted to be at least one of screwed, threaded, snapped, or twist-locked onto one another.

35. (Cancelled)

36. (Currently Amended) The spinal implant system having a vertebral prosthesis compatible with multiple disc prostheses of claim 32, further comprising a locking ring adapted to secure the first portion relative to the second portion ~~wherein the shaft is adjustable to change the height of the shaft.~~

37. (Withdrawn) The spinal implant system having a vertebral prosthesis compatible with multiple disc prostheses of claim 32, wherein the shaft is at least partially constructed of a mesh.

38. (Previously Presented) The spinal implant system having a vertebral prosthesis compatible with multiple disc prostheses of claim 32, wherein the first artificial disc is manufactured by a first manufacturer and the second artificial disc is manufactured by a second manufacturer, wherein the first manufacturer is different from the second manufacturer.

39. (Currently Amended) A vertebral prosthesis system having interchangeable endplates, comprising:

a shaft comprising a first portion slidably received in a second portion and wherein the height of the vertebral prosthesis is adjusted by sliding the first portion relative to the second portion;

a first endplate having a first side adapted to be coupled to a first end of the shaft and a second side coupled to a first artificial disc;

a second endplate having a first side adapted to be coupled to the first end of the shaft in place of the first endplate and a second side coupled to a second artificial disc, the second artificial disc having a different configuration from the first artificial disc; and

a pedicle screw retainer coupled at least one of the shaft, the first endplate, and the second endplate;

wherein the first artificial disc and the second artificial disc each comprise a disc endplate and a disc core coupled to the disc endplate, and further wherein each disc core is configured to allow each disc endplate to move relative to the shaft whereby the first and second artificial discs act as joints to permit a range of motion between the shaft and a spine.

40. (Cancelled)

41. (Original) The vertebral prosthesis system having interchangeable endplates of claim 39, wherein the first endplate and the shaft are adapted to be screwed onto one another.

42. (Cancelled)

43. (Withdrawn) The vertebral prosthesis system having interchangeable endplates of claim 39, wherein the shaft is at least partially constructed of a mesh.

44-60. (Cancelled)

61. (Currently Amended) A spinal implant system, comprising:

a vertebral prosthesis having a support and a prosthesis endplate, wherein the support comprises a first portion slidably received in a second portion and wherein the height of the vertebral prosthesis is adjusted by sliding the first portion relative to the second portion~~the support is adjustable to change the height of the vertebral prosthesis~~, the vertebral prosthesis having a longitudinal axis configured to be aligned along the axis of a spine;

a pedicle screw adapted to secure the vertebral prosthesis to a pedicle;

an artificial spinal disc having a disc endplate and a disc core coupled to the disc endplate, wherein the disc core is coupled to the prosthesis endplate, and further wherein the disc core is configured to allow the disc endplate to move relative to the prosthesis endplate whereby the artificial disc acts as a joint to permit a range of motion between the vertebral prosthesis and the spine; and

a pedicle screw retainer coupled to at least one of the endplate and the support, the pedicle screw retainer comprising:

a top,

a bottom,

a side wall defined between the top and the bottom, and

at least one aperture defined in the side wall, the aperture having an axis generally perpendicular to the longitudinal axis of the vertebral prosthesis, wherein the aperture is configured to receive a pedicle screw extending through a pedicle located adjacent to the pedicle screw retainer.

62. (Cancelled)

63. (Currently Amended) The spinal implant system of claim 61, further comprising a pedicle screw received by the at least one aperture of the pedicle screw retainer wherein the support comprises a first portion slidably received in a second portion and wherein the height of the vertebral prosthesis is adjusted by sliding the first portion relative to the second portion.

64. (Currently Amended) The spinal implant system of claim 61[[63]], further comprising a locking ring adapted to secure the first portion relative to the second portion.

65. (Previously Presented) The spinal implant system of claim 64, further comprising a set of interlocking teeth on the first portion and the second portion, the interlocking teeth adapted to engage one another to secure the first portion relative to the second portion.

66. (Withdrawn) The spinal implant system of claim 61, wherein the support is at least partially constructed of a mesh.

67. (Cancelled)

68. (Previously Presented) The spinal implant system of claim 61, wherein the prosthesis endplate has a structure adapted to interlock with the artificial spinal disc.

69. (Previously Presented) The spinal implant system of claim 61, further comprising a second prosthesis endplate coupled to the support, the second prosthesis endplate adapted to be coupled to a second artificial spinal disc.

70. (Withdrawn) The spinal implant system of claim 61, further comprising a second prosthesis endplate coupled to the support, the second prosthesis endplate having teeth adapted to be coupled to a bone.